



# TOWERS B – 2018 CHECKLIST

Rank: \_\_\_\_\_

Final Score: \_\_\_\_\_

Team Number: B\_\_\_\_ Team Name: \_\_\_\_\_

Student Names: \_\_\_\_\_

## Construction Parameters

2.a. Team enters only one Tower, built prior to the competition. Y N

3.a. The Tower is a single structure, with no separate or detachable pieces. Y N

3.a. The Tower is constructed of wood and bonded by adhesive with no other materials used. Besides ink barcodes or markings from the construction process, wood is not painted, color enhanced, or have preprinted/paper labels affixed. Y N

3.c. The Tower supports the Loading Block  $\geq 50.0$  cm above the Test Base. Y N

3.d. The portion of the Tower more than 25.0 cm above the Test Base passes through an 8.0 cm diameter opening or hole. Y N

3.b. The Tower spans a 20 cm x 20 cm opening on a Test Base and the loading chain is suspended within 2.5 cm of the center of the opening in the Test Base. Y N

3.e. The loading point on the Tower is constructed to permit placement of the Loading Block and suspended chain on and through the Tower, to support the bucket. Y N

3.f. The Tower is constructed such that only the Loading Block supports the chain and bucket. Y N

3.h. No portion of the Tower extends below the top surface of the Test Base prior to testing. Y N

3.g. The Tower does not brace against any edge of the Test Base for lateral support at any time. Y N

3.i. Students are able to answer questions regarding the design, construction, and operation of the device. Y N

**ALL CONSTRUCTION PARAMETERS MET (IF N, TIER 3 OR LOWER)** 1. Y N

6.c. Load Scored Bonus: Tower spans the 29 cm diameter circle throughout testing (5,000 g) 2. Y N

## Competition Parameters

4.a.iv. Team's Load Scored estimate (first tie breaker) 3. \_\_\_\_\_

4.a.v. No alterations, substitutions, or repairs are made to the Tower after check-in. Y N

4.b.i. Once participants enter the event area to compete, they do not leave or receive outside assistance, materials, or communication until they are finished competing. Y N

4.b.iii. Participants place the Tower on the Test base and assemble the Loading Block Assembly and bucket as required to load the Tower. Y N

4.b.iv. Once loading of sand has begun, the Tower is not adjusted. Y N

4.b.vi. Participants do not directly contact the bucket except by using the tips of the stabilization sticks. Y N

**ALL COMPETITION PARAMETERS MET (IF N, TIER 2 OR LOWER)** 4. Y N

## Other

6.d.iv. Tower unable to load for any reasons (e.g. cannot accommodate Loading Block or failure to wear eye protection) (If Y, Tier 4) 5. Y N

General Rule: Disqualified (notify the team and their coach as soon as possible) 6. Y N

## Tower Measurements

6.a. Mass of Tower (in grams to the closest 0.01 g) 7. \_\_\_\_\_

6.a. Load Supported (in grams; 15,000 g max) 8. \_\_\_\_\_